Title (en)

Drive device for motor operated vehicle door with movement sensor

Title (de)

Antriebsvorrichtung für eine motorisch verstellbare Kraftfahrzeugtür mit einem Bewegungsdetektor

Title (fr)

Dispositif d'entraînement pour une porte de véhicule motorisée pourvu d'un détecteur de mouvement

Publication

EP 1713160 A3 20170111 (EN)

Application

EP 06075746 A 20060330

Priority

US 67017105 P 20050411

Abstract (en)

[origin: US2006225358A1] A drive assembly for a vehicle door, comprising: a motor having a driving member; a housing having a shaft rotatably received therein; an input member being rotatably received upon the shaft, the input member being operatively associated with the driving member, wherein rotation of the driving member causes rotation of the input member; an armature mounted on the input member; a rotor fixedly secured to the shaft, the rotor being cylindrical in shape and has a plurality of teeth positioned along the periphery of the rotor, the teeth being positioned in an equidistant manner; a coil mounted to the housing, the coil providing magnetic flux lines through the rotor to attract the armature when the coil is energized; and an inductance sensor assembly mounted to the housing in a facing spaced relationship with respect to the plurality of teeth of the rotor, wherein rotational speed and direction of the rotor is detected by the inductance sensor assembly.

IPC 8 full level

H02K 11/00 (2016.01); **H02K 7/116** (2006.01)

CPC (source: EP US)

E05F 15/603 (2015.01 - EP US); **E05F 15/646** (2015.01 - EP US); **H02K 7/1166** (2013.01 - EP US); **H02K 11/215** (2016.01 - EP US); **H02K 11/225** (2016.01 - EP US); **H02K 11/38** (2016.01 - EP US); E05Y 2201/216 (2013.01 - EP US); E05Y 2201/434 (2013.01 - EP US); E05Y 2201/462 (2013.01 - EP US); E05Y 2400/3014 (2024.05 - EP US); E05Y 2400/36 (2013.01 - EP US); E05Y 2600/454 (2013.01 - EP US); E05Y 2600/458 (2013.01 - EP US); E05Y 2900/531 (2013.01 - EP US)

Citation (search report)

- [I] US 6408573 B1 20020625 - FUKUMOTO RYOICHI [JP], et al
- [YD] US 5046283 A 19910910 - COMPEAU DAVID E [US], et al
- [YD] US 6043644 A 20000328 - COULON YVES DE [CH], et al
- [A] WO 2004025063 A1 20040325 - MITSUBA CORP [JP], et al
- [A] US 2004256881 A1 20041223 - TAKEDA NOBUHIKO [JP], et al
- [A] US 4984668 A 19910115 - ONISHI MASAYOSHI [JP], et al

Cited by

WO2013149949A1; US8872669B2; WO2013003464A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

US 2006225358 A1 20061012; CN 1847598 A 20061018; EP 1713160 A2 20061018; EP 1713160 A3 20170111; EP 1713160 B1 20200617

DOCDB simple family (application)

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